CLAIMS .

An agent for treating migraine comprising, as an active ingredient, a xanthine derivative represented by formula (I):

$$\begin{array}{c|c}
R^1 & X^2 & R^3 \\
 & N & N \\
 & N & N
\end{array}$$

$$\begin{array}{c|c}
R^4 & (I) \\
 & R^2
\end{array}$$

[wherein R^1 , R^2 and R^3 are the same or different, and represent a hydrogen atom, lower alkyl, lower alkenyl or lower alkynyl;

 R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (wherein R^5 represents substituted or unsubstituted aryl, or substituted or a unsubstituted heterocyclic group; and n represents an integer of 0 to 4) or a group represented by formula (II):

(wherein Y^1 and Y^2 are the same or different, and represent a hydrogen atom, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl or a substituted or unsubstituted feterocyclic group);

 X^1 and X^2 are the same or different, and represent an oxygen atom or a sulfur atom]

or a pharmaceutically acceptable salt thereof.

2. The agent for treating migraine according to claim

- 1, wherein X^1 and X^2 are both an oxygen atoms.
- 3. The agent for treating migraine according to claim 1 or 2, wherein \mathbb{R}^4 is a group represented by formula (II):

$$Y^1$$
 Z
 Y^2
(II)

(wherein Y^1 , Y^2 and Z each have the same meanings as defined above).

- 4. The agent for treating migraine according to claim 3, wherein Y^1 and Y^2 are both hydrogen atoms.
- 5. The agent for treating migraine according to claim 3 or 4, wherein Z is substituted or unsubstituted aryl or a group represented by formula (III):

$$- \bigcirc (CH_2)_m$$

$$R^6$$
(III)

(wherein R^6 represents a hydrogen atom, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3).

6. A method for treating migraine which comprises administering an effective amount of a xanthine derivative represented by formula (I):

$$\begin{array}{c|c}
X^2 & R^3 \\
R^1 & N & N \\
X^1 & N & N
\end{array}$$

$$\begin{array}{c|c}
X^2 & R^3 \\
N & N & N
\end{array}$$

$$\begin{array}{c|c}
R^4 & (1)
\end{array}$$

(wherein R^1 , R^2 , R^3 , R^4 , X^1 and X^2 each have the same meanings as defined above)

or a pharmaceutically acceptable salt thereof.

7. Use of a xanthine derivative represented by formula(I):

$$\begin{array}{c|c}
X^2 & R^3 \\
R^1 & N & N \\
X^1 & N & N
\end{array}$$

$$\begin{array}{c|c}
X^2 & R^3 \\
N & N & R^4
\end{array}$$
(I)

(wherein R^1 , R^2 , R^3 , R^4 , X^1 and X^2 each have the same meanings as defined above)

or a pharmaceutically acceptable salt thereof for the manufacture of an agent for treating migraine.